REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Formalities

The claims and specification have been revised to place the application in proper U.S. format and to correct various grammatical and idiomatic errors, including the error noted in item 1 on page 2 of the Official Action. Because the changes are all formal in nature, it is respectfully submitted that the changes do not involve new matter.

2. Rejection of Claims 1-4 Under 35 USC §103(a) in view of:

- *"Guidelines For Using XML For Electronic Data Interchange"* (Bryan),
- U.S. Patent No. 6,631,379 (Cox),
- *"Standardized Electronic Forms Information Interchange: Pilot Project Summary Report"* (Osipenko), and
- U.S. Patent Publication No. 2001/0009033 (Morisaki)

This rejection is respectfully traversed on the grounds that neither the Cox patent nor the Bryan, Osipenko, and Morisaki publications discloses or suggests a system in which received XML manufacturing schedules are **parsed**, **converted** to EDI documents, and integrated in a database with other EDI documents. The one reference said to disclose such **parsing *and* conversion** merely discloses a "document type description" (DTD) form that has been formatted as an SGML object (see Appendix B of the Osipenko article).

More specifically:

a. The Bryan article discloses the concept of "capturing and coding EDI information. . .through coded XML-coded forms." The resulting XML/EDI "business objects" can be transmitted and handled over the same communication paths as conventional XML objects using off-the-shelf XML parse trees and the like. *However, as noted by the Examiner, the Bryan article fails to disclose or suggest parsing the XML/EDI objects upon receipt in order to extract the data contained in the objects and convert the data back into conventional EDI objects*

for integration in an EDI database. Instead, the XML file structure appears to be maintained at both the sending and receiving ends, with data extracted as necessary by an XML parser at the receiving end, but no conversion to a traditional EDI data format.

b. The Cox patent teaches parsing data items and elements from the XML file, and then storing the parsed data items and elements by, essentially, integrating database commands in the XML documents in order to speed up processing by avoiding the need to generate database commands (such as SQL commands) each time an XML file is to be parsed and stored in the database. *Again, there is no suggestion in the Cox patent of converting the "parsed data items and elements" into EDI or any other specific data interchange format before storing them.* Instead, Cox merely teaches a method of expediting the data storage process. Conversion into EDI would actually be contrary to the teachings of Cox since it would add steps to the storage process, rather than eliminate steps (which is the objective of the Cox system and method).

c. The Osipenko article teaches use of SGML (of which XML is a subset) to exchange business data, and in Appendix B discloses a service agreement "DTD" or "**document type description**" which is alleged by the Examiner to convert XML to EDI. However, the service agreement document type description clearly describes an SGML form, with no mention of EDI. *There is no teaching or suggestion that SGML form disclosed therein should be parsed and then converted for integration in an EDI database.* Instead, the Osipenko article purports to offer a "standard" data interchange format. **The purpose of a "standard" is to eliminate the need for conversion of otherwise incompatible standards, not to suggest such conversion**.

d. Finally, the Morisaki publication teaches storage of business data in a database as EDI objects, but fails to disclose or suggest creation of the EDI objects from data parsed from XML objects.

Taken together, the Bryan article teaches transfer of business data via "XML/EDI" objects consisting of business data in an XML package, the Cox patent teaches parsing of business data from XML objects for storage in a database, the Morisaki publication generally teaches packaging and storage of business data as EDI objects, and the Osipenko article teaches an SGML object (which may be a DTD, but has nothing to with EDI). None of these publications discloses conversion of parsed XML data into EDI packages for storage in a database. At best, the references taken together suggest that it is convenient to transfer data using XML (Bryan, Cox, Osipenko), that the XML data may be handled as SGML or XML/EDI objects (Bryan, Osipenko) or parsed data (Cox), and that EDI may be used as an object management technique in databases (Morisaki). None of the references suggests that EDI object management of the type taught by Morisaki may be used to re-package and manage data that has been parsed from XML objects in the manner taught by Cox. To the contrary, Cox teaches direct storage of parsed data, and Morisaki teaches storage of objects without parsing.

The one reference that is alleged to teach parsing of XML objects followed by conversion to EDI is the Osipenko article, but the Osipenko article merely teaches inclusion of business data in an SGML format object, which is essentially what is taught by the Bryan article. Nowhere does the Osipenko article, in Appendix B or elsewhere, teach receipt of an XML object followed by parsing and conversion as claimed. In all of the references, once an XML object is formed, it either remains an XML object or is parsed to extract the data, and once an EDI object is formed, it is handled as an EDI object. In fact, those references that teach XML (or SGML) consider XML to be a more convenient format than EDI. **There is no teaching of parsing an XML object in order to convert it to EDI**. While the XML loader of Cox could be used to parse data for conversion into an EDI object, that is not the purpose of the XML loader of Cox. The fact that a device *could* be combined with another device is not a sufficient basis for a rejection under 35 USC §103(a).

The alleged motivation for the combination proposed by the Examiner, which is said to be provided by the Bryan article, as set forth in the paragraph bridging pages 4 and 5 of the

Official Action, does not involve parsing and conversion from XML to EDI. The fact that Bryan want to "fuse" five existing technologies does not imply that Bryan is contemplating maintaining the existing XML and EDI formats and merely providing for the conversion from one format to the other. Rather, Bryan seeks to provide a "fusion" of the technologies in order to create a sixth technology that is intended to **replace** the existing technologies, and not merely convert from one to the other.

Because none of the references cited by the Examiner discloses or suggests, whether considered individually or in any reasonable combination, the claimed conversion of XML objects into EDI objects *following receipt and parsing of the XML objects*, it is respectfully submitted that the ordinary artisan would not have found such parsing and conversion to be obvious, and withdrawal of the rejection of claims 1-4 under 35 USC §103(a) is respectfully requested.

3. Rejection of Claim 5 Under 35 USC §103(a) in view of:
   - "*Guidelines For Using XML For Electronic Data Interchange*" (Bryan),
   - U.S. Patent No. 6,631,379 (Cox),
   - "*Standardized Electronic Forms Information Interchange: Pilot Project Summary Report*" (Osipenko),
   - U.S. Patent Publication No. 2001/0009033 (Morisaki),
   - U.S. Patent No. 5,265,103 (Brightwell),and
   - "*The Windows Interface, An Application Design Guide*" (Microsoft)

This rejection is respectfully traversed on the grounds that the Brightwell patent and the Microsoft design guide, like the Cox patent and the Bryan, Osipenko, and Morisaki publications, fails to disclose or suggest a system in which received XML manufacturing schedules are parsed, converted to EDI documents, and integrated in a database with other EDI documents.

While the Brightwell patent does disclose generation of a resend message, it does so in the context of transmission of groups of messages called "frames." The purpose of the Brightwell patent is to ensure that the retransmission goes back to the frame including the erroneous message while maintaining the overall chronology of "messages." The Brightwell

patent is not concerned with XML transmission or EDI business data object storage, and therefore could not have suggested the claimed parsing and conversion. Since the Microsoft publication merely discloses display of an error message (giving rules for suitable error message formats, and also does suggest any sort of parsing and conversion of XML formatted schedules, withdrawal of the rejection of claim 5 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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